Art Unit 2613

## CENTRAL FAX CENTER

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## <u>IN TH</u>E CLAIMS

Please replace the claims with the following, in which claims 1, 2, and 11 are amended and claims 7, 8, 12, and 14 to 19 are cancelled:

1. (currently amended) A method of non-disruptively modifying the routing of lightpaths a selected lightpath between a transmitting node and a receiving node in an optical mesh network by employing a bridge and roll technique, comprising:

adding a bridge comprising an additional lightpath from the transmitting node to the receiving node; and

performing a roll by switching the selected lightpath to the additional lightpath, in combination with the use of temporary path protection to change whereby the routing of the selected lightpaths lightpath is changed.

- 2. (currently amended) The method as defined in claim 1 wherein the bridge and roll technique is employed with the the selected lightpath is a lightpath in service.
- 3. (original) The method as defined in claim 2 wherein the selected lightpath is a working lightpath.
- 4. (original) The method as defined in claim 2 wherein the selected lightpath is a protection lightpath.
- The method as defined in claim 1 wherein the mesh network operates in a wave division multiplex (WDM) mode.
- 6. (original) The method as defined in claim 1 wherein the bridge and roll technique is operator directed.
- 7. (cancelled)
- 8. (cancelled)

- 9. (original) The method as defined in claim 1 wherein a network management system is employed to implement route modifications.
- 10. (original) The method as defined in claim 9 wherein the network management system requests a lightpath routing modification.
- 11. (currently amended) A system for non-disruptively modifying the routing of lightpaths a selected lightpath between a transmitting node and a receiving node in an optical mesh communication network using a bridge and roll protocol, the system comprising:

means to implement a bridge by adding an additional lightpath from the transmitting node to the receiving node; and

means to perform a roll by switching the selected lightpath to the additional lightpath.

and-roll protocol wherein temporary paths are employed to change whereby the selected lightpath lightpaths is rerouted without having to take the lightpath out of service.

- 12. (cancelled)
- 13. (original) The system as defined in claim 11 wherein a network management system (NMS) implements the bridge and roll protocol.
- 14-19. (cancelled)